

WHAT IS CLAIMED IS:

1. A method of managing I/O resources in an information delivery environment, comprising
5 modeling utilization of at least one of said I/O resources; and managing at least one of said I/O
resources based at least in part on said modeled utilization.

2. The method of claim 1, wherein said modeling comprises modeling utilization of at least
10 one of said I/O resources based at least in part on at least one of said system I/O performance
characteristics associated with said I/O resources.

3. The method of claim 2, wherein the value of at least one of said system I/O performance
15 characteristics is estimated.

4. The method of claim 2, wherein the value of at least one of said system I/O performance
characteristics is monitored.

5. The method of claim 1, wherein said I/O resources comprise at least one of said file
system resources, storage system resources, or a combination thereof.

6. The method of claim 1, wherein said information delivery environment comprises
25 delivery of continuous media data from an information management system to a network;
wherein said I/O resources comprise I/O capacity and buffer memory space of said information
management system; and wherein said managing comprises balancing said I/O capacity with said
buffer memory space to ensure uninterrupted delivery of said continuous media data.

7. The method of claim 1, wherein said information delivery environment comprises delivery of continuous media data from an information management system to a plurality of viewers across a network; wherein said I/O resources comprise I/O capacity and buffer memory space of said information management system; and wherein said managing comprises balancing said I/O capacity with said buffer memory space to ensure uninterrupted delivery of said continuous media data to said plurality of viewers.

8. The method of claim 7, wherein said information management system comprises a content delivery system that includes a storage system; said content delivery system being coupled to said network; and said storage system including said I/O resources and having at least one storage device or at least one partitioned group of storage devices.

9. The method of claim 8, wherein said managing comprises setting a cycle time of said storage device or partitioned group of storage devices to be greater than or equal to the service time of said storage device or partitioned group of storage devices.

10. The method of claim 9, wherein said managing further comprises setting a cycle time of said storage device or partitioned group of storage devices to maximize the number of simultaneous viewers of said continuous media data that is supported by said information management system.

11. The method of claim 8, wherein said method further comprises allocating at least one of said I/O resources between background system I/O activities and delivery of said continuous media data.

12. The method of claim 11, wherein said at least one of said allocated I/O resources comprise at least one of I/O capacity, buffer space, or a combination thereof.

5 13. The method of claim 12, wherein said background system I/O activities comprise at least one of said large file write operations, small file access operations, or a combination thereof.

10 14. The method of claim 13, wherein said method further comprises allocating said at least one I/O resources between said background system I/O activities and delivery of said continuous media data based at least in part on a variable resource parameter.

15 15. The method of claim 13, wherein said method further comprises dynamically allocating said at least one I/O resources between background system I/O activities and continuous media data delivery based at least in part on monitored background system processing activity.

20 16. The method of claim 15, wherein said method further comprises dynamically allocating said at least one I/O resources between background system I/O activities and continuous media data delivery in a manner that avoids interruptions in delivery of said continuous media data to existing viewers.

25 17. The method of claim 15, wherein said method further comprises selecting and terminating delivery of at least one stream of continuous media data to accommodate at least one background system I/O activity; wherein said at least one stream of continuous media data is selected for termination based at least in part on at least one priority-indicative parameter.

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